

Amendments to the Claims:

1. (Currently amended) An integrated device for oxygenating and filtering blood flowing through an extracorporeal blood circuit comprising:

a blood reservoir having an inlet for receiving venous blood and an outlet for supplying venous blood;

a centrifugal blood pump having an inlet connected to receive blood from the outlet of the blood reservoir and an outlet;

a heat exchanger having a blood inlet connected to receive venous blood from the outlet of the pump and a blood outlet for supplying temperature controlled venous blood, the blood inlet being located below the blood outlet to define a blood flow path from a bottom of the heat exchanger to a top of the heat exchanger;

an oxygenator having an inlet connected to receive venous blood from the outlet of the heat exchanger and an outlet for supplying oxygenated blood;

an arterial blood filter having an inlet connected to receive oxygenated blood from the outlet of the oxygenator and an outlet for supplying filtered oxygenated blood; and

a monolithic housing including a first portion for defining the blood reservoir, a second portion for defining the centrifugal blood pump, a third portion for defining the heat exchanger, a fourth portion for defining the oxygenator and a fifth portion for defining the arterial blood filter, wherein the centrifugal blood pump has an axis, and wherein the centrifugal blood pump is positioned within the monolithic housing such that the axis of the centrifugal blood pump is horizontal and such that the outlet of the centrifugal blood pump is located at a top of the second portion of the monolithic housing.

2. (Canceled).
 3. (Canceled).
 4. (Original) The integrated device of claim 1 wherein the blood reservoir comprises a venous reservoir and a cardiectomy reservoir.
 5. (Original) The integrated device of claim 4 wherein the monolithic housing comprises connection means for allowing removable connection of the first portion.
- Claims 6 to 10 (Canceled).